



BvAT celebrates 10 years of service to farmers in Africa

Peter Kamau | This month, the Biovision Africa Trust (BvAT) will be ten years old since it was launched after being registered in Kenya as a Trust in 2009 June. The 10th anniversary celebrations will take place on the sidelines

of 1st International Conference on Agroecology on Transforming Agriculture and food Systems in Africa that will take place at Safari Park Hotel in Nairobi.

BvAT was formed in 2009 and started its operations in 2011, to support the Farmer Communication Programme (FCP), which consisted of independent projects, the TOF magazine, TOF radio, the Infonet information platform and the Farmer Communication Outreach.

The Biovision Farmer Communication Programme started in 2005 with the launch of *The Organic Farmer* (TOF) magazine. TOFRadio was to follow two years later while the Infonet and Farmer Communication Outreach followed in 2007 and 2009 respectively. Following the registration of BvAT, the four projects were put together under BvAT programme. A Kiswahili version, *Mkulima Mbunifu* is published and distributed in Tanzania.

The TOF magazine has a print run of 34,000 copies every month, making it the fourth largest publication in Kenya in terms of circulation after the mainstream

dailies such as *the Daily Nation*, *The Standard* and *The Star* newspaper. The magazine is distributed through the Postal Corporation of Kenya and courier companies reaching over 300,000 farmers in Kenya.

The TOF Radio has a listenership of 4 million; its programmes are aired in KBC radio station and vernacular such as *Mbaitu FM*, *Mwatu FM* stations and *Sahara FM* in Kisumu which airs in Nyanza and Western Kenya regions. The Farmer Communication Outreach has information Farmer Resource Centres in 12 counties across the country.



Dear farmer,

The Biovision Africa Trust (BvAT) is celebrating 10 years since it was started in the year 2009. The celebration is a big milestone for the organization if we take into consideration what it has achieved in a decade. The fast growth of BvAT into a full fledged independent organisation can only be described as phenomenal.

For decades, Kenyan farmers, including their counterparts in the rest of Africa lacked information material that could help them improve in crop and animal production.

Research institutions would develop very good technologies and research findings which only ended up gathering dust in their shelves with no channels for dissemination of the information to farmers.

In Kenya, the national agricultural extension service suffered a big setback when the World Bank stopped funding the service in the 1990s. Farmers were left to their own devices and had no source of information or training.

So when we started the TOF magazine in 2005, there was no agricultural publication in the country worth talking about. The launch of the magazine was a huge celebration for farmers across the country that at last they could get agricultural information for free every month.

The magazine introduced a new dimension in farming where farmers learnt to use simple technologies for improving soil fertility, pest and disease control in an environmentally friendly way. To support the magazine, a weekly radio was started in 2007, quickly followed by Farmer Outreach and the Infonet, an internet information platform. All these projects were consolidated under the FCP in 2011.

BvAT activities have since expanded to the rest of Africa, where farmers now get information through the Ecological Organic Agriculture (EOA) Initiative. The continental initiative is a big step that will give impetus to the promotion of organic agriculture across the African continent. BvAT is becoming a dependable organization for knowledge management in organic agriculture in Eastern Africa and good example to the rest of Africa.

Our thanks go to the Biovision Foundation which started this initiative and to the many donors who have come on board to support it. It is not easy for a donor to support a project for more than 10 years. Already their persistence and belief in the programme is beginning to bear fruit with thousands of farmers adopting EOA technologies complemented by the fast growth of the organic sector in Kenya and East African region (See page 5).

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TOF on the web

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icipe.org

TOF Rad o

KBC Thursday 7.30 pm
Mbaitu FM Friday 8.30 pm

BvAT transferring knowledge to farmers

The Biovision Africa Trust (BvAT) is celebrating its 10th anniversary on June 19th 2019. The day is being celebrated on the sidelines of the 1st International Conference on Agroecology Transforming Agriculture and Food Systems in Africa that will be held at Safari Park hotel from 18th to 21st of June 2019. TOF editor Peter Kamau interviewed the BvAT Executive Director, Dr David Amudavi on the achievement of the organization in the last 10 years. Excerpts:

Q. Can you give the history of Biovision Africa Trust?

Our organization was conceptualized in June 2009, when the Articles of Association called the trust deed were developed. It all started when Dr Hans Herren, President of the mother organization (Biovision Foundation of Switzerland), and the Co-founder, Mr. Andreas Schriber, felt there was need to have an African organization to continue and expand the

Foundation was supporting in Kenya in terms of getting results from research by ICIPE and other research institutions into application by farmers.

Q. What were the specific tasks that BvAT was to fulfill?

As the ICIPE Director-General, Dr Hans Herren saw the great work that ICIPE was doing in areas of human, animal, plant and environmental health; but ICIPE being a research centre of insect science, it did not have the mandate of transferring the technologies, new knowledge to farmers and communities to benefit from. This is why he and his colleague, Andreas Schriber, founded Biovision Foundation of Switzerland in 1998, to support programmes that could facilitate the application and getting the technologies, the new knowledge and information to farmers and communities in Kenya, East Africa and even to the rest of the African continent. However, they felt the Foundation was not tapping into all the possible

sources of funds to get research results to as many communities as possible.

They felt that Nairobi was best placed therefore to host a local organization close to ICIPE and other research centres such the CGIAR centres International Livestock Research Institute (ILRI), World Agroforestry Centre (formerly ICRAF) and tap into the knowledge that was being generated for dissemination to farmers. Biovision Africa Trust, popularly called 'BvAT' was created for this purpose; to compliment efforts of Biovision Foundation in Switzerland by tapping into networks and partnerships and therefore expanding the portfolio of donors to reach more farmers.

BvAT is now working in other African countries under the Ecological Organic Agriculture (EOA) Initiative. Is that part of its mandate?

Whereas it was initially envisaged to be a national or local organization, BvAT has quickly

grown beyond this to become a continental organization. By this I mean we have been instrumental in the development of the increasingly important continental initiative called Ecological Organic Agriculture (EOA) which started in 2011. In May 2011, we had representatives of NGOs, National Organic Agriculture Movements (NOAMs) from about five countries and a representative from African Union meeting at SACDEP- A sustainable agriculture NGO in Thika, Kenya. Together with PELUM (Kenya) which is a member of PELUM Association represented in 13 countries in Africa, we came up with a concept note, a proposal and a 5-year action plan initially supported by the Swedish Society for Nature Conservation (SSNC) and African Union (AU). Later, the Swiss Agency for Development Cooperation (SDC) came on board to support the initial pilot work in West Africa while SSNC further supported piloting of the project in six countries namely Kenya, Uganda, Tanzania, Ethiopia, Nigeria and Zambia. The SDC support was towards baseline of the various elements of the emerging initiative in Mali, Benin and Senegal based on six key thematic areas - research training and extension, information and communication, value chain and market development, networking and partnerships, policy and programme development and the sixth being institutional capacity development. Following the baseline, SDC supported the first phase of the initiative for 5 years from 2014 to 2018. The second phase of four years has begun.

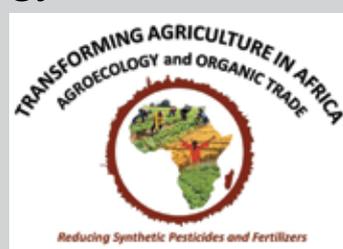
Q. What role is BvAT playing in this continental initiative?

BvAT has a lead role in this continental initiative in two important ways; as the executing agency for the support provided by SDC in 9 countries; Kenya,

Major Agroecology Conference for Nairobi, Kenya

An International Agroecology Conference coordinated by BvAT will be held in Nairobi starting June 18 2019 to June 21 2019. The conference that takes place at the Safari Park Hotel has three main objectives; Reducing synthetic fertilizers and pesticides; Scaling up of FAO, Scaling Up Agroecology Initiative in Eastern Africa and Showcasing opportunities and potentials of Ecological Organic domestic and regional trade in East Africa.

The event that is targeting the participation of over 500 participants will help stakeholders in the sub-sector share experiences and challenges while looking at best practices that can help improve organic production and trade in East Africa. This will help inform future development of organic



trade sector in the continent.

Participants will be drawn from African Union Commission, the governments, NGOs, proponents of organic agriculture, National Organic Agriculture Movements (NOAMs), farmers, farmer associations, individuals, learning and research institutions.

Among the keynote speakers will be former ICIPE Director General and President of the Millennium Institute Dr Hans Herren, Former IFOAM Organic International Director General Dr. Andre

Leu (now with Regeneration International) and Anti-GMO activist professor Gilles Eric Seralini.

During the conferences different organizations will make presentations on different components of the conference. The World Food Preservation Centre (WFPC) would make a presentation on strategies that can be used to reduce the use of chemical fertilizers and pesticides, IFOAM Organics International will present their findings on the just ended OTEA project that focused on organic trade including the lessons learnt during its implementation while Biovision Africa Trust (BvAT) will look at the progress of the Ecological Organic Agriculture for which it has taken lead in 8 African countries. *Peter Kamau*

The Organic Farmer is an independent magazine produced monthly for the East African farming community. It promotes organic farming and supports discussions on all aspects of sustainable development.

The articles in the *The Organic Farmer* do not necessarily reflect the views of icipe nor Biovision Foundation or Biovision Africa Trust (BvAT).



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Editor Peter Kamau

Layout The Regal Press Kenya Limited

Administrator Lucy W. Macharia, +254 719 052 186

Editorial Advisory Board Dr. Sunday Ekesi (icipe), Henry Neondo (ASNS), Dr Jane Njuguna (KEFRI), Dr. Joseph Mureithi (KALRO), Dr. Henry Kiara (ILRI), Dr. David Amudavi (BvAT), George Nyamu (KENAFF), John Njoroge (KIOF), William Makechi (farmer, Kakamega), Regina Muthama (farmer, Machakos) and Rt Snr Chief Josiah Arende (farmer, Rongo).

Sponsor Biovision, a Swiss-based foundation for the promotion of ecological development, based in Zürich, Switzerland.

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BvAT expands operations to the rest of Africa

Uganda, Tanzania, Rwanda and Ethiopia in Eastern Africa and 4 countries in West Africa namely, Benin, Senegal, Mali and Nigeria. We handled a budget of more than 7 million dollars in the first phase. In the new phase BvAT is responsible for a budget of more than 6.5 million dollars. The second role making BvAT to take on a Pan-African function is that it hosts the Secretariat to the initiative's Continental Steering Committee. The secretariat is based right here in ICIPE Campus, and it liaises with regional secretariats in Eastern, Western and Southern Africa. Such roles can only be undertaken by an organization that is Pan-African in scope. So I am proud to say that BvAT has graduated from being a local organization to becoming a Pan-African organization.

We have supported more than 32 partners in the 9 countries that we are working in, mainly through understanding their capacity needs to deliver on their mandates and assisting them in coming up with action plans for addressing their weaknesses, so that they can become strong and vibrant organizations. This is a very important achievement that BvAT has attained in the area of institutional capacity development among players supporting the development

of organic agriculture in the continent.

Q. What major role has BvAT played in promotion of organic agriculture in Kenya?

BvAT is great partner to the Kenyan government in this sector. Our Farmer Communication Programme (FCP) has been one of the key programmes that the Ministry of Agriculture, Livestock and Fisheries and in particular, the extension department relies on when it comes to dissemination of timely, scientifically-validated information to farmers. When it comes to some of the emerging challenges facing agriculture, it's the BvAT's FCP that comes in handy to inform farmers very quickly on possible solutions. A case in point is the invasion of the fall armyworm in the country. When the pest invaded the country in 2017, we investigated very quickly what could be done even before some of the research institutions like ICIPE had any solution to the problem and started work to understand the pest. Our field officers came up with very innovative and simple practical solutions such as the use of natural concoctions from herbs that could be used to control the pest. This is just one example that our programme was able to respond to as an early warning and providing a solution before

other players could come in.

Our programme also provides farmers with information on seed quality control and suitability of various types of seeds for various agro-ecological zones in Kenya. We have been at the forefront in giving farmers information on maize seed and how to avoid fake seed, show which companies produce quality seed and how to identify genuine seed. This complements the efforts of the Ministry of Agriculture's extension service.

On potato seed, we have given information that ensures quality controls are maintained to prevent the importation of low quality seed that has the potential to introduce diseases and pests. This has compelled the Kenya Plant Health Inspectorate Service (KEPHIS) to be more rigorous in seed inspection. This has enabled the quality control body to condemn poor quality seed imported by unscrupulous companies that import seed without following the right protocols on seed importation such as subjecting the seed to the mandatory National Performance Trials (NPTs) that test viability and suitability of seed under different ecological conditions before such seed is allowed into the country.

Q. Where would you like to see BvAT in the next 10 years?



Dr. David Amudavi

I would like to see BvAT become a leading organization in Africa in knowledge management relating to ecological organic agriculture as the key to sustainable intensification, strengthening health of soils, ecosystems, water retention and people's health. This will enable farmers to produce food for their nutrition and other needs in a safe way while managing systems that are resilient and adaptable to climate change. With the new initiative supported by the German Federal Ministry for Economic Cooperation and Development (BMZ) through GIZ, called Global Knowledge Centre for Organic Farming in Africa, we hope to achieve this as we take responsibility for the Eastern Africa Knowledge Hub. This will support six African countries but also be linked to other knowledge hubs in Southern and West Africa.

Key achievements of Farmer Communication Programme (FCP)

TOF magazine

TOF is one of BvAT's flagship projects that started in the year 2005. It's a monthly publication with a print run of 34,000 copies and the fourth biggest publication in Kenya in terms of circulation after the mainstream dailies *the Daily Nation*, *The Standard* and *The Star* newspapers. Some key achievements:

- Each issue reaches about 300,000 farmers who get scientifically validated information on various topics including soil fertility, seed quality, pests and disease control, value addition, dairy farming, animal breeding and how to produce food and keep animals in an environmentally sustainable way. Visits to farms in distribution areas

confirm that many farmers are adopting the ESA technologies disseminated to them.

- The magazine reaches farmers groups, extension staff, partner NGOs, churches who distribute the magazine. These organizations use our magazine content in training and enable the magazine to reach more farmers in their project areas. Organisations like Technoserve (Kenya) have made training videos on topics we cover and they screen to farmers during field days and in training.
- The Magazine website won the 2018 Bloggers Association of Kenya (BAKE) award for the best designed agricultural website.



TOF Radio

TOF Radio reaches more than 4.5 million farmers through Kenya Broadcasting Corporation (KBC) Mbaitu FM Mwatu FM and Sahara FM. It has also partnered with KOCH FM to disseminate information on human health. The aim of the radio programme is to strengthen access to information on Ecologically Sustainable Agriculture (ESA).

- In September 2013, TOF Radio acquired an Ultra modern recording studio where programmes for airing through various radio stations are recorded and edited before airing. It no longer produces programmes through other

What we do in pictures



TOF Magazines roll out of press in Nairobi before being distributed to farmers across the country



Award-winning radio producer Musdalafa Lyaga Okello records a radio programme at BvAT studio at ICIPE, Nairobi



Belinda Weya, the Infonet Regional Manager trains farmers at Katangini in Kubo South, Kwale County on how to access info from Infonet



A youth group trained by Farmer Communication Outreach in Makueni, show vegetables grown on vertical gardens.



Peter Kamau, (left) TOF Editor, and radio assistant Charles Kimani interview a farmer at Wundanyi in Taita Taveta County



A farmer milks a cow at Kapsara, Trans-Nzoia County. TOF training on dairy farming has enabled dairy farmers increase production



A farmer inspects his Mandala garden. Many farmers have adopted such technologies promoted by BvAT Farmer Outreach Programme



A group of farmers in Nigeria show off leafy vegetables they have just harvested. Many farmers have benefited from the EOA Initiative

Organic production and certification growing rapidly

Kenya's certified organic production is the 6th fastest growing globally more farmers groups, companies and individuals convert into organic production.

Jack Juma | Kenya's organic sector has experienced a steady growth especially in the last ten years. The certified organic agricultural land now stands at 172,225 hectares, which is an increase of 167,589 hectares in ten years. The wild collection or bio-prospecting land has increased to 151,425 hectares. There are also 44,966 certified producers, 24 processors, 5 importers and 15 exporters.

The growth of the certified organic production in Kenya, which was indicated as the 6th fastest growing globally by the Swiss Organic Agriculture Institute-FiBL Research conducted in 2018 could be attributed to a number of factors. For a long time, Kenya organic production was largely done individual, medium and small-scale farmers with little production of key commodities.

Organic production spreading

In the recent years, there has been a great development of producer groups' certification models with support from individual exporters which have focused on a range of crops such as coffee, avocados, cashewnuts, macadamia, sesame, pineapples, tea, coconut and also in wild collection of gums and resins, honey and nuts. Production is now spread across the country unlike in the past where there was heavy concentration in central Kenya.

Local markets growing

The local market development has also been a great impetus for the development of local certification schemes and particularly the development of Participatory Guarantee System (PGS) as alternative to third party certification which is increasingly gaining recognition and acceptance as a credible approach in organic guarantee. There are about 21 PGS groups across the country serving around 1,233 farmers with around 3,282 hectares under PGS production. The regional collaboration in PGS development has ensured that common PGS policy and criteria are in place and are regularly appraised through the Joint Mark Management Committee (JM)



A customer buys organic honey during a field day organised by the TOF Magazine in Nairobi

Organic certification promotes regional growth

The East Africa Organic products standard (EAOPS), and the East Africa Organic mark (EAOM), are two important tools that have enhanced the local certification scheme. The standard was recently revised in compliance with the law also to increase the scope especially inclusion of aquaculture standards.

The standard is used by local farmers as a guide on organic production. The local certification bodies certify organic production based on its requirements and it's also used by stakeholders on wider issues such as policy influence. The Kilimohai mark is used as a promotion mark for products certified or PGS approved based on the EAOPS. The two tools have also stimulated regional trade in organic products and also potential for collaboration among the local certification bodies in developing joint inspection protocols and peer reviews.

The East African Organic Mark

There is also great local capacity in support of certification system. There are four local certification bodies, and four international certification bodies, a pool of trained inspectors, and quality advisory services which enhance compliance to both export regulations and local standards.

Challenges facing the sector

In spite of the positive outlook and growth trend, organic certification still faces some challenges key being:

High certification cost: Many small-scale farmers can hardly sustain the cost of certification and the producer groups are mostly organized through a trader or exporter hence the exporter pays for certification and owns the certificate. Thus the farmers do not have bargaining power or flexibility on marketing of their produce.

International accreditation: For the local certification bodies the challenge has been getting international accreditation or recognition, this is particularly because of the cost and also systems which need improvement such as export certification.

Sustainability: The local organic certification system is still not at a scale that can sustain all the certification bodies. The local Certification Bodies (CBs) therefore need to improve on their system and diversify on their services. The awareness level of the Kilimohai mark is still relatively low and a lot of awareness creation is still needed to stimulate consumption and consequently production and demand for certification services.

The future looks bright

The organic guarantee system in

Kenya and to a larger extent the East African Community (EAC) has great future as more land is being converted, governments are becoming more responsive in standardization, the local markets are growing, the Kilimohai mark is getting increased recognition and the local certification bodies have seen the need to improve on their systems and collaboration.

The innovative alternative accreditation system for local CBs provides an opportunity for mutual recognition and collaboration among certification bodies through a peer review system based on common protocol through the East Africa Organic Mark Secretariat.

The Participatory Guarantee System (PGS) is providing a window of opportunity as alternative to third party certification where farmers' participation in the process is crucial. The PGS model is fast growing and enhancing local market development and it is being replicated in other schemes such as Slow Food.

The organic wild collection especially in the Northern Kenya for example, is not yet fully tapped, the aquaculture is also untapped and new openings in Coastal, Western and Rift Valley regions provide more opportunity for organic production.

Jack Juma is an Organic Participatory Guarantee System expert. jumamugo@yahoo.com / kajuma@koan.co.ke

How to make compost in your organic farm

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partners e.g Agricultural Information and Resource Centre (AIRC)

- TOFRadio has also designed an integrated web-based platform called Tusemezane (where farmers can give their feedback in real-time on topics carried under TOF magazine, TOF radio, infonet and Farmer Communication Outreach. They also receive messages and alerts vote or leave messages which are answered by a team of staff and experts.
- The TOF Radio programme has earned many awards including the Thomson Reuters Foundation Food and nutrition award (2017) for video on the challenges of postharvest losses among Mango farmer. In 2019 TOF radio journalist Musdalafa Lyaga was recognized among 20 influential journalists who were celebrated during the UNESCO World Press Freedom Day for his contribution towards strengthening access to and use of Ecologically Sustainable Agriculture (ESA).



Musdalafa Lyaga Okello

- Through its Radio and Video Unit, TOF radio has developed programmes for Green Peace Africa to promote crop diversification farmers and also made farmer training videos for SNV (Netherlands) Access Agriculture, ICIPE's AFERIA project among many others. This has helped develop meaningful and functional partnerships



Members of BvAT staff and some of the board members during a meeting at ICIPE, Nairobi

Farmer Communication Outreach

TOF has 12 Farmers Resource Centres spread across the country. The centres act as libraries for storage and dissemination of information material and are used for training of farmers groups in 15 counties in Kenya. The farmer training programme has realized the following achievements:

- Improved livelihoods for farmers eg in Western Kenya where farmers trained in on indigenous vegetables have benefited from sales and increased income.
- Through collaboration with CABI International staff trained as plant doctors, farmers can get diagnostic help on plant pests and diseases in real time, reduces losses and increasing farm yields and income.
- Internship programme for students from local universities have enabled many students understand Ecologically Sustainable Agriculture (ESA), provide practical life experience and enabled many of them to get jobs in the agricultural sector.

Infonet- Biovision information platform

The infonet website has been redesigned to make it user-friendly and mobile phone responsive. This means information can be accessed on mobile phones.

- The 6th Infonet offline version was produced in March 2018. It is available for download from Infonet Homepage or on USB Flash Drive.
- In 2018, there were 355,000 visits to the website, 51% of the visits were from Africa. ----The top 5 African countries that access Infonet are Kenya, Nigeria, South Africa, Uganda and Tanzania. Farmers, extension officers, trainers and students easily access specific information from Infonet on ecological agriculture.
- New content added to Animal Health and Plant health datasheets contains up to date issues of The Organic Farmer (TOF) Magazine and Mkulima

Mbunifu Magazine (MKM, Tanzania).

Mkulima Mbunifu-Tanzania

Since its launch in 2009, *Mkulima Mbunifu* has established itself as a popular credible and one of new sources of information to farmers in Tanzania. There is a growing number of small-scale farmers in the country who need copies despite a shortage.

The magazine has won many awards at the annual *Nane Nane* agricultural shows in Tanzania for the most outstanding agricultural information stand. The Ministry of Agriculture has embraced the magazine and its extension staff use to train farmers.

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Where to find our Farmer Resource Centres

RESOURCE CENTRE	COUNTY
KALRO Katumani	Machakos
Kamukuywa	Bungoma
Tiriki	Vihiga
Wangige	Kiambu
Kisii	Kisii
Gilgil	Nakuru
Mutulani	Makueni
Murungaru	Nyandarua
Turasha RC	Nyandarua
Gilgil	Nakuru
Kagio	Kirinyaga
Maragua	Murang'a
Kangundo	Machakos
KALRO Kakamega	Kakamega
Singi	Busia

Temperature regulation important in an incubator

Many farmers would like to know: What can I do when power goes off in an incubator?

Farmers with egg incubators must have a backup power source especially if they are relying on main power sources. When you purchase an incubator, there is need to have a backup generator for use as an alternative source of power. In case a farmer does not have a generator, a simple method is to have a tray below the incubator eggs. When the power goes off, put warm water in a tray; the warm water will help maintain the temperatures. However you have to keep checking to enable the water remains warm to ensure the eggs remain at the same temperature level and humidity. This means the farmer has to have a thermometer to keep monitoring the temperatures.

Importance of temperature regulation in the incubator

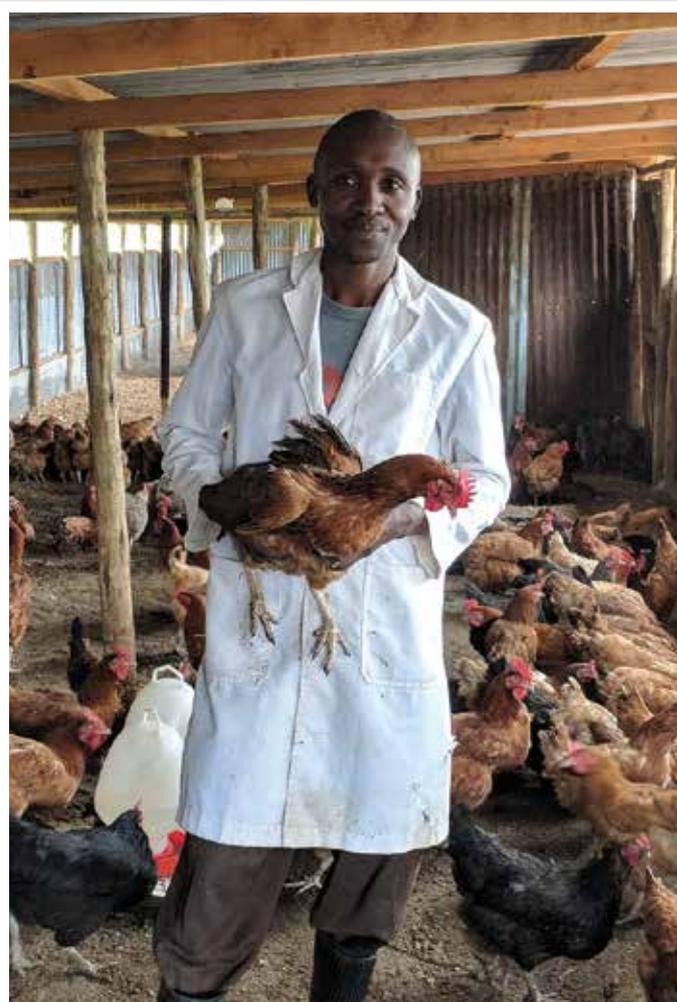
Temperature in the incubator should constantly be maintained at 37.5°C – 38.5°C. This is vital for maximum egg hatching. Low temperatures (below 37°C) cause the embryo to develop problems or even die. Chicks hatched under this condition will have underdeveloped internal organs. Low temperature causes eggs to take very long to hatch or at times they do not hatch at all. On the other hand, high temperature (above 38.5°C) kills the embryo before hatching. If the eggs do hatch under extreme temperature, they develop

abnormalities leading to death shortly after hatching. Farmers should check the temperature in the incubator before placing the eggs and bring it to the right temperature. Make sure the temperature holds steadily at 37.5°C – 38.5°C. The ventilation shafts at the top of the incubator are important for temperature control. If the temperature is high, open the shaft till the right temperature is achieved. When the incubator is below the ideal range tightly shut the shaft.

Is it advisable to put off the lighting bulb during the day?

Under tropical conditions and the type of housing where there is adequate natural light, farmers can put the lights off during the day. But poultry experts advise that lighting is very important in poultry production. There are two types of lamps; the one used for brooding chicks (infrared bulb for heating) and the lighting lamp which provides light to the chicks.

The lighting bulb should be kept on throughout the night and even in cloudy conditions because the chicks feed continuously. The infrared bulb should be kept on throughout the night and even during daytime depending on the climatic conditions under which the chicks are reared. For the sake of egg-laying hens, farmers should ensure that the light is kept for at least 16 hours in a day. So lighting should be extended into the night for egg laying and feeding. To save energy, farmers



Farmers should always ensure their chicken shed have adequate light for improved egg production

should use LED bulbs which save energy and cost of lighting.

Answers by Elkanah Isaboke

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- The primary beneficiaries of the magazine include 69,572 small-scale farmers, 1368 famers groups, 153 extension offices across the country, 73 schools and institutions 43 community-based organization and 46 individuals, 28 churches, 26 NGOs, 22 agricultural training institutes.
- More than 15 copies are produced

Strategic achievements by the EOA Initiative

The institutionalization of the (EOA) Initiative, agenda beyond the African Heads of State and Government Decision through AUC chairing the Continental Steering Committee (CSC), ECOWAS chairing the Regional Steering Committee (RSC) of West Africa and EAC in talks

to chair the RSC of the Eastern Africa cluster and Ministry of Agriculture departments chairing the National Steering Committees (NSCs).

- A growing establishment of a coalition of international partners to support the implementation of the decision (EU(AUC, SDC, Sida (SSNC), Turing Foundation, BMZ/GIZ, Biovision Foundation (Switzerland).
- Establishment of a mosaic of partners to support the implementation of the Decision drawn for the public, private, academia and civil society sectors to support research, capacity building, knowledge management, value chains and market development, networks and partnerships etc.
- Established and functional

secretariats at continental, regional and national levels to support the administration and coordination of steering committees that provide oversight and guidance of the Decision implementation at all levels.

- Pushing for the alignment with the Comprehensive African Agriculture Development Programme Performance Platform (CAADP-PP) Biennial Review reporting to develop and include EOA indicators in the reporting.
- A growing high level political support as evidenced by AUC and ECOWAS recognizing, chairing and funding the CSC and RSC (West Africa) respectively.

EOA Contribution to BvAT success first phase

The first phase of Ecological

Organic Agriculture (EOA) Initiative contributed to the strategic vision of BvAT through its continental reach in 8 African countries of Mali, Senegal, Benin, Nigeria, Kenya, Tanzania, Uganda and Ethiopia.

A total of 774,040 stakeholders have been exposed EOA practices through extension, social media, conference forums, research papers and books, EOA curricular, public gatherings, exchange visits, Training of Trainers (TOTs) among other channels. In addition to the people reached, the institutionalization of the project from national to continental level was very successful. All participating countries have established national platforms, steering committees and secretariats. An AU-led Continental Steering Committee with 19 members has a secretariat hosted by BvAT in Nairobi.

TOF Radio answers your questions

TOFRadio is broadcast on KBC on Thursday at 7:30pm and Mbaitu FM on Friday at 8.30pm. Tune in and listen to farmer experiences and expert advice on agribusiness and eco-friendly farming methods. On this page, we respond to some of the issues raised by farmers in their correspondence to the radio program. Send your questions and comments via SMS 0715 422 460, email: admin@theorganicfarmer.org

Farmers should always scout for fall armyworm in maize

Musdalafa Lyaga | *Daisy Khaoya of Shinyalu asks TOF Radio how to detect fall army worms in her maize farm.*

Farmers work very hard in their farms and when their crop is attacked by pests, the fear of losing the entire crop can be extremely stressful.

Most of affected farmers panic and turn to spraying chemical insecticides even though pesticides are very costly affecting both the farmers' income and health adversely.

Fall armyworms prefer to eat the leaves of maize but they also damage other crops.

Start monitoring your maize crop as soon as they emerge and visit your field at least three times a week for the first 6 weeks to better understand the impact of both harmful pests and friendly insects in your farm. This will enable you detect challenges earlier and come up with timely solutions thus minimising damage to your crop, leading to higher yields.

Inspect plants regularly

At the start, inspect 10 plants in a row by looking carefully in the whorl (where leaves attach to the stem) of each plant for signs of recent leaf damage or

fresh excrement in the from fall armyworm larvae. This is a clear sign of a live larvae or even a fall army worm in the whorl. Fall armyworm differ from other pests like stem borers.

"Stem borers feed on the stock making it hollow from the inside but fall armyworms larvae eat and create holes in the leaves and finally dig very deep holes in the stems," says Mugendi.

Lays many eggs

It is very important for a farmer to understand how fall armyworm lives. A fall armyworm moth can fly long distances and lays a bunch of 200 eggs on the leaves (it lays about 1500 eggs in its lifetime). The eggs are usually cream or grey and are covered in silk on the underside or top. The egg masses can be as big as a thumb nail and are covered in fluffy whitish hair.

About 3 days after the eggs are laid, little armyworm larvae hatch from the eggs. They forage on the leaves especially of cereals making little holes that look like windows on the leaves. You may also see some young armyworms hanging from silk threads. They actually spin these threads so the wind can carry them to neighbouring maize plants.

Fall armyworm eat each other

Within 5 days after hatching, the young army worms start moving inside the leaf whorl. As they grow larger they chew holes in the main leaves, but when you open a whorl, you may find only one armyworm as they eat each other to reduce competition for food.

Rains help control pest

"When there are heavy rains, there are few of these caterpillars because the rain drops kill them," says farmer Patrick Mugendi.

Heavy rains will also drown armyworms hiding in the whorl.

When the fall armyworm is big enough, you can tell the difference between it and other caterpillars. The fall army worm is light green or dark brown with longitudinal stripes with an upside Y on its head. When you check the upper side, you will see four dots that form a square.



They feed at night

After having spent 2 to 3 weeks feeding on the maize plant, the worm exits and falls on the soil. It burrows (digs into the soil) less than a finger deep in the soil where it covers itself in a dark brown cocoon.

Scouting is best done early in the morning or late in the evening when this destructive pest is active. By being vigilant, you will harvest more and make more money from your healthy maize.

For more information on Natural pest control methods https://www.infonet-biovision.org/natural_pest_control

Radio Taifa frequencies for our TOFRadio programmes

TOWN	FM FREQUENCIES	MW (MEDIUM WAVE FREQUENCIES)
Nairobi	92.9 MHz	
Mombasa	100.8 MHz	
Kisumu	104.5 MHz	
Kakamega	104.5 MHz	
Bungoma	104.5 MHz	
Eldoret	88.6 MHz	
Nakuru	104.1 MHz	
Meru	90.4 MHz	
Nyeri	87.6 MHz	
Kisii	103.3 MHz	
Malindi	90.1 MHz	
Kapenguria	93.3 MHz	
Kitale 9	3.3 MHz	
Voi/Kibwezi	96.9 MHz	
Namanga	89.9 MHz	
Lodwar	88.6 MHz	
Lokichoggio	89.3 MHz	
Garsen	93.1 MHz	
Kajjado	92.9 MHz	
Kitui	92.9 MHz	
Lamu	96.3 MHz	
Maralal		1107 KHZ
Wajir		1152 KHZ
Marsabit		675 KHZ
Garissa		567 KHZ

ICIPE Scientist receives international award

Dr Baldwin Torto, an ICIPE Principal Scientist and Head of Behavioural and Chemical Ecology Unit is the 2019 winner of the Agropolis Louis Mallasis International Scientific Prize for Agriculture and Food. Dr. Torto, an expert on chemical ecology and entomology was awarded the prize for his contribution in addressing challenges associated with agricultural production and food security in Africa through the development of pest management strategies and training young scientists.

The global scientific prize is awarded once in every two years to outstanding scientists for their exemplary and promising contribution in promoting innovation through research,

development or capacity building in order to improve food security and agricultural systems as well as addressing food security and poverty reduction. Each winner receives a plague certificate and a prize of 20,000 Euros.

"The prize means a lot to me because it reminds all of us that the vision of Louis Malassis for sustainable agriculture and food security and education is still relevant and alive today. The challenges of food security in Africa are even more complex today than in the past and need urgent attention. It is our collective responsibility as scientists, innovators, technologists, policy makers farmers and development partners to respond to these challenges with long lasting



Dr. Baldwin Torto

science driven solutions,' says Dr. Baldwin Torto.

Dr Torto is also an extraordinary Professor at the University of Pretoria, South Africa.